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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/700,023	02/23/2001	Armin Herbert Emil August Olschewski	107775	1361

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EXAMINER

KING, BRADLEY T

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/700,023

Applicant(s)

OLSCHEWSKI ET AL.

Examiner

Bradley T King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 9, 10, 12, 13, 16-21, 24, 25, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-6, 9, 12, 13, 16-21, 24, 25, 29 and 30 is/are rejected.
- 7) ☒ Claim(s) 3 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites "an angled or right angled gear transmission". The meaning of this limitation is not clear. The limitation "right angled" appears to be encompassed by the broader "angled", however the limitations are recited in alternative form. It is unclear what the addition of "or right angled" is intended to convey.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 4, 9, 13, 21, 25, and 29-30 rejected under 35 U.S.C. 102(b) as being anticipated by Penrod et al (US#5788341).

Penrod et al disclose all the limitations of the instant claims including; a screw actuator having a housing, a motor 57, an actuating member 56, and a screw mechanism which provides a

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linear movement of the actuating member with respect to the housing in response to a rotational movement of the motor, the screw mechanism comprises a screw 53, a nut 51 engaging each other by rolling elements, the screw being rotatable with respect to the housing, and a reduction gear means (see figure 2), where the nut is fixed with respect to the housing and the screw is rotatably supported with respect to the housing by means of the rolling elements and wherein the screw engages the actuating member through a rolling element capable of carrying an axial and a radial load. Note the ball and socket connection of the screw assembly and the piston. The ball is a rolling element.

Regarding claim 2, figure 2 discloses coupling means in the form of a cross pin.

Regarding claim 21, Penrod et al disclose an position sensor in figure 2.

Regarding claim 30, Penrod et al disclose the combination of the actuator with disc brakes (figure 8).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Penrod et al (US#5788341).

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Penrod et al disclose all the limitations of the instant claim with exception to at least two gear reduction steps. Penrod et al instead illustrate symbolically a reduction gear. It is well known in the art to use multiple gear reduction steps to provide appropriate gearing in a compact form. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a plurality of gear stages to provide adequate gear reduction and decrease the size of the actuator.

7. Claims 6, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Penrod et al (US#5788341) in view of Taig (US#4850457).

Penrod et al disclose all the limitations of the instant claims with exception to a planetary gear reduction. Planetary gear reductions are well known in the art such as demonstrated by Taig. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize a planetary gear reduction taught by Taig for the reduction gear of Penrod et al as an obvious means of gear reduction, allowing compact actuating arrangement.

8. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Penrod et al (US#5788341).

Penrod et al disclose all the limitations of the instant claim with exception to a coating on the screw mechanism. Wear resistant coatings are well known in the art of bearings to reduce friction and increase the useful life of components. It would have been obvious to a person of

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ordinary skill in the art at the time the invention was made to utilize a wear resistant coating in the bearing elements of Penrod et al to increase the life and efficiency of the device.

Allowable Subject Matter

9. Claims 3, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 18-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments filed 11/18/03 have been fully considered but they are not persuasive.

Regarding the new limitation of a rolling element, it is maintained that this feature is disclosed by Penrod. Penrod shows a ball and socket connection. The ball element can be considered a "rolling element" as broadly recited by the claims. Regarding claims 5 and 24, it is maintained that both multiple gear reduction steps and carbon coatings are well known in the art as set forth by the rejection. Also note Blossch et al who illustrates multiple gear steps and Liston who discusses carbon coatings (column 4, first full paragraph).

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Conclusion

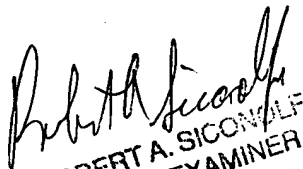
12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley King whose telephone number is (703)308-8346.

BTK

January 25, 2004

 1/25/04
ROBERT A. SICONOLFI
PATENT EXAMINER